

Overview of malaria control activities and programme progress

In 2002, Brazil reported approximately 40% of the total number of the malaria cases in the Americas. Almost 99% of cases occur in the Legal Amazon Region, where no more than 12% of the country's population resides. An increase in the number of cases began in the 1980s. In 1992, 572 000 cases were reported and a peak of 610 878 cases was reported in 2000. By 2002, the number of cases was reduced to 349 873 among 2.12 million slides examined, giving a 16.5% smear positivity rate. A slight rebound in 2003 of 379 500 cases was reportedly associated with population movement to the periphery of large cities as well as to the Legal Amazon Region.

The NMCP promotes prompt diagnosis and appropriate treatment of malaria and is implementing other aspects of the Global Malaria Control Strategy. A lack of human and other resources, as well as technical and managerial weakness at local level and little information to guide activities, limit the coverage of effective interventions in controlling the disease.

The improvement in the epidemiological situation between 2000 and 2002 was related to a new action plan called the Plan for Intensification of Control Measures in the Amazon (PICAM) that was initiated in June 2000. The number of municipalities at risk of malaria declined from 160 in 1999 to 76 in 2002, with a 69% reduction in the number of hospitalized cases and a 36% reduction in hospital deaths caused by malaria. Malaria studies were initiated in Acre, Amapa, Amazonas, Maranhão, Mato Grosso, Pará and Rondônia to measure drug efficacy, anopheline mosquitoes resistance to insecticides, risk factors for transmission including in urban areas, and piloting rapid diagnostic testing. Drug efficacy studies involve MQ, Q+D for *P. falciparum* and CQ for *P. vivax* in multiple sites.

The MoH provides the vast majority of financial support for malaria control. The total budget for 2003 was just over US\$ 40 million, although part of the funding was made available from external sources in the context of the PICAM.

National malaria policy and strategy environment

National malaria strategy overview for 2003

	Strategy
Treatment and Diagnosis Guidelines	Yes
Published/updated in	2001
Monitoring antimalarial drug resistance	Yes
Number of sites currently active	7
Home management of malaria	NA
Vector control using insecticides	Yes
Monitoring insecticide resistance	
Number of sites currently active	
Insecticide-treated mosquito nets (ITNs)	Yes
Intermittent preventive treatment (IPT)	NA
Epidemic preparedness	

Current antimalarial drug policy

	Current policy
Uncomplicated malaria	
<i>P. falciparum</i> (unconfirmed)	
<i>P. falciparum</i> (lab confirmed)	Q(3d)+D(5d)+PQ(day6) Q(3d)+D(5d)+PQ (Amazon)
<i>P. vivax</i>	CQ+PQ(7d)
Treatment failure	MQ15/20+PQ(day2) MQ15/20+PQ (Amazon)
Severe malaria	ASU vs ATM or Q
Pregnancy	
Prevention	
Treatment	Q (Pf) or CQ (Pv)

EPIDEMIOLOGICAL DATA

Following WHO recommendations, malaria case reporting is carried out in most countries. The data presented below reflect aggregated malaria cases at the national level and are presented by gender, age and subnational level as submitted to WHO. Malaria reporting from national surveillance systems varies in quality and reporting completeness and may have limited value in understanding the actual malaria burden, but may be useful for understanding trends in the relative burden of malaria in the public health sector.

Reported malaria cases (annual)

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
560 396	614 431	609 860	466 190	564 406	565 727	455 194	392 976	471 892	609 594
2000	2001	2002	2003	Date of last report: 7 December 2004					
610 878	388 658	349 873	379 551						

Reported malaria by type and quality

For most recent year

Reported malaria cases	379 551
Reported malaria deaths	30

Probable or clinically diagnosed

Malaria cases	
Severe (inpatient or hospitalized) cases	
Malaria deaths	
Slides taken	1 474 656
Rapid diagnostic tests (RDTs) taken	

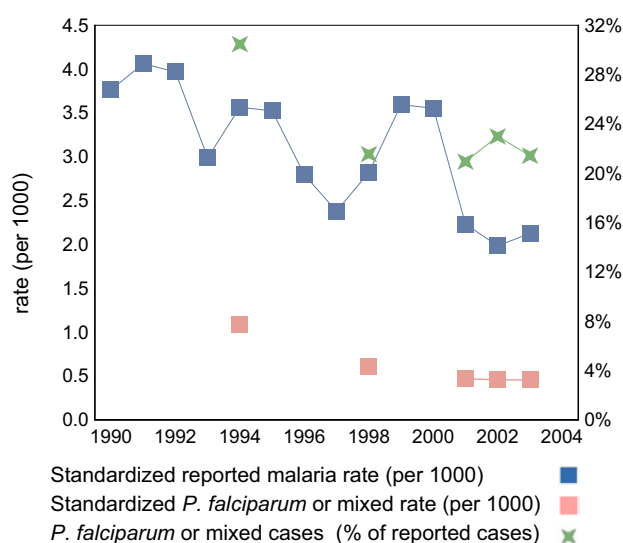
Laboratory confirmed

Malaria cases	379 551
<i>P. falciparum</i> or mixed	81 343
<i>P. vivax</i>	297 962
Severe (inpatient or hospitalized) cases	10 719
Malaria deaths	30

Investigations

Imported cases

Estimated reporting completeness (%)



Reported malaria cases by age and gender

Group	Subgroup	2000	2001	2002	2003	%
	Total	610 878	388 658	349 873	379 551	100
Age	<1 year				6 635	2
	1-4 years				36 191	10
	5-14 years				79 583	21
	15+ years				232 834	61

Reported malaria cases by selected subnational area

9 areas	2000	2001	2002	2003	%
Amazonas		43 716	68 621	133 299	35
Para		181 181	137 339	101 560	27
Rondonia		55 356	68 634	92 925	24
Amapa		22 586	15 839	14 565	4
Acre		4 590	6 300	9 881	3
Maranhao		33 247	9 164	8 990	2
Roraima		14 936	6 508	8 538	2
Mato Gros		6 200	4 556	4 173	1
Tocantins		448	215	4 013	1

COVERAGE OF ROLL BACK MALARIA INTERVENTIONS

Information related to the coverage of RBM key interventions is presented here. This includes coverage of antimalarial treatment, possession and use of insecticide-treated nets (ITNs), and use of intermittent preventive treatment (IPT) among pregnant women (PW) where national policy indicates.

Insecticide-treated nets

ITNs are one of the key interventions promoted by RBM. Coverage of ITNs is best assessed through household (HH) surveys which ask questions on possession and use of nets, as well as insecticide treatment status, among the target populations of children under 5 years of age (U5) and pregnant women. Data below represent available household survey results in which household possession and use of nets and ITNs have been assessed.

A survey to evaluate effectiveness of ITNs in three different populations of the Amazon region is currently being planned.

SERVICE DELIVERY AND MALARIA-RELATED COMMODITIES

General malaria-related services delivered

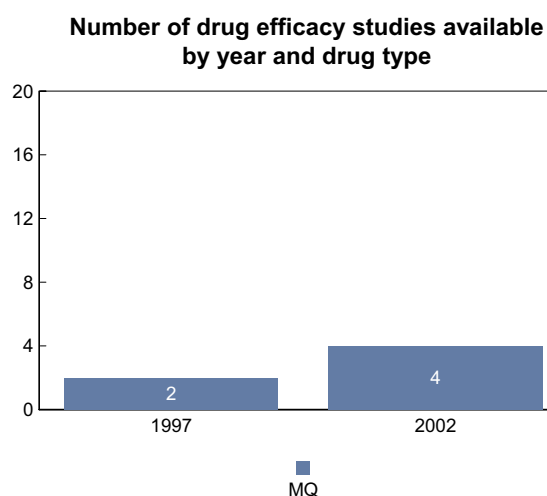
Services delivered for malaria control include numbers of nets and insecticides delivered or sold, numbers of nets (re-)treated with insecticide and numbers of households (HHs)/units sprayed during IRS campaigns. These services and service-related commodities mostly reflect core malaria control activities of national malaria control programmes. The information reflects annual, country-reported data.

No data is currently available.

MONITORING ANTIMALARIAL DRUG EFFICACY

Monitoring antimalarial drug efficacy is important for understanding the impact of antimalarial treatment being delivered and the need for drug policy change, essential for ensuring prompt access to effective treatment. Median, range and quartiles are based on percentage clinical failure for uncomplicated *P. falciparum* malaria for countries in Africa south of the Sahara, and percentage total failure for all other areas. Included are studies that used WHO protocol among selected drugs.

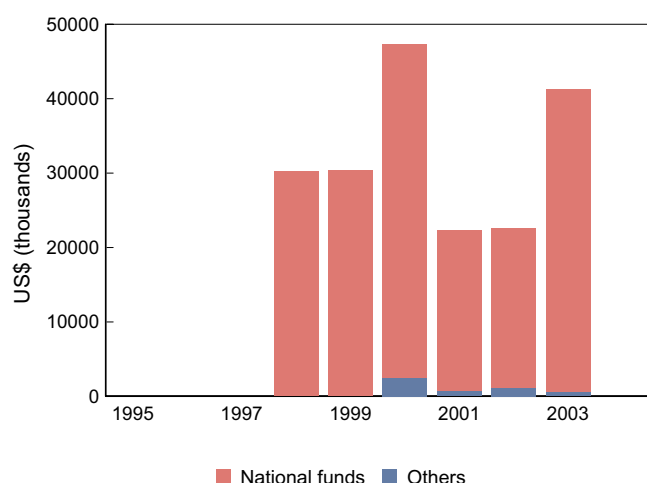
Study years	Number of studies	Median	Range		Percentile	
			Low	High	25th	75th
MQ						
1996-2002	6	5.2	0.0	9.7	0.5	7.9



FINANCING FOR MALARIA

Annual funding for malaria control

This information represents country-reported national and other resources budgeted or spent for national malaria control programme efforts. If information was reported in a different currency than US\$, the annual average of the official exchange rate from the World Development Index was used for conversion. Currency is presented in US\$ (thousands).



	National funds	Others
1995	-	-
1996	-	-
1997	-	-
1998	30 189	-
1999	30 308	-
2000	44 767	2 478
2001	21 517	805
2002	21 412	1 138
2003	40 696	524
2004	-	-

Malaria funds from the Global Fund to Fight HIV, Tuberculosis, and Malaria

Information on additional resources provided to countries through GFATM from 2-year committed funds for malaria from successful proposals through the first four rounds is presented. The details on approved proposals, grant agreements and disbursements to date are provided. Figures are presented in US\$. These data are maintained and updated by GFATM.

No funding was approved for malaria control by the GFATM.

General notes and remarks

See explanatory notes at the beginning of the section.